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CENTRAL INTELLIGENCE AGENCY

REPORT INFORMATION FROM FOREIGN DOCUMENTS OR RADIO BROADCASTS

CD NO.

DATE OF

INFORMATION

NO. OF PAGES

SUPPLEMENT TO REPORT NO.

1954

DATE DIST. 28 Jul 1954

COUNTRY

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SUBJECT

PUBLISHED

Scientific - Chemistry, analytical

Bimonthly, monthly, thrice-monthly periodicals

WHERE **PUBLISHED** Moscow, Kiev

How

PUBLISHED 1951-1954

LANGUAGE

THE UNITED STATES, WITHIN THE MEANING OF TITLE IS. SECTIONS 21 TO 194. OF THE U.S. CODE, AS AMENDED. 175 TRANSMISSION OR REVE

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SOURCE

As indicated

USSR TRENDS IN THE DEVELOPMENT OF NEW TOOLS AND METHODS IN THE FIELD OF CHEMICAL ANALYSIS

The most significant recent development in USSR work on analytical methods is the introduction of the chromathermographic method (1, 2, 3, 4). This method is of use in prospecting for petroleum and natural gas (5) and also has general applicability for the concentration, determination, and isolation (potentially on an industrial scale) of substances which occur in a state of high dilution. A considerable amount of research is being done on new modifications and applications of the polarographic method. Work on the recently introduced application of the polarographic method for the investigation of salt melts is being continued (6). Frequent references are encountered in current USSR technical publications to the use of the polarographic method in research on combustion kinetics. To give a typical example, it has been stated in one of the published papers that separate determinations of formaldehyde, acetaldehyde, organic peroxides, and hydrogen peroxide were carried out in connection with an investigation of the oxidation of hydrocarbons in the gas phase (7).

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